

CLAIMS

1. Aqueous mixture comprising
- 5 A) at least one alkoxylate of the formula (I)
 $R^1-O-(CH_2-CHR^2-O)_n-CH_2-CH_2-OH$ or its phosphoric ester,
 wherein
 R^1 is a linear or branched C_6-C_{19} -alkyl radical,
 R^2 is hydrogen, methyl or ethyl, and
10 n has an average value of 3 to 11;
- B) at least one hydroxy carboxylic acid in simple form or as a polyoligo
 hydroxy carboxylic acid or salts thereof or a polyacrylate or a
 phosphonate or salts thereof or any mixtures therefrom,
- C) an aromatic sulphonation or sulphination or sulphation product or salts
15 thereof,
- D) an alkaline earth metal salt,
and also optionally further additives.
- 20 2. Mixture according to Claim 1 wherein
- R^1 is a linear or branched C_8-C_{15} -alkyl radical,
 R^2 is hydrogen or methyl,
 n has an average value of 5 to 9;
- B is citric acid or sodium gluconate or an α -hydroxy polyacrylate or
25 ATMP, HEDP, DTPMPA, EDTMPA or PBTC or salts of these
 phosphonates or any mixture therefrom,
- C is cumenesulphonic acid or naphthalenesulphonic acid or an alkali
 metal/ammonium salts thereof, and
- D is magnesium chloride, magnesium sulphate, calcium chloride or
30 calcium sulphate.

3. Mixture according to Claim 1 or 2 wherein

R^1 is a linear or branched C_{12} - C_{15} -alkyl radical,

R^2 is hydrogen or methyl,

n has an average value of 6 or 7; and

5 B is citric acid or sodium gluconate or DTPMPA or any mixture therefrom,

C is cumenesulphonic acid or an alkali metal/ammonium salt thereof, and

D is magnesium chloride or magnesium sulphate.

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4. Mixture according to Claim 3 wherein

B is a mixture of citric acid and sodium gluconate,

C is sodium cumenesulphonate, and

15 D is magnesium chloride.

5. Mixture according to Claim 1 comprising two different alkoxylates of the formula (I),

A1) wherein

20 R^1 is a branched C_6 - C_{14} -alkyl radical,

R^2 is hydrogen, methyl or ethyl, and

n has an average value of 3 to 11;

and

A2) wherein

25 R^1 is a linear or branched C_8 - C_{19} -alkyl radical,

R^2 is hydrogen, methyl or ethyl, and

n has an average value of 3 to 10,

and wherein B) to D) are defined as mentioned.

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6. Mixture according to Claim 5 wherein in

- A1) R^1 is a branched C_8 - C_{12} -alkyl radical,
 R^2 is hydrogen or methyl, and
n has an average value of 5 to 9;

5 and in

- A2) R^1 is a linear or branched C_{10} - C_{17} -alkyl radical,
 R^2 is hydrogen or methyl,
n has an average value of 4 to 8,

and

10 B is citric acid or sodium gluconate or an α -hydroxy polyacrylate or ATMP, HEDP, DTPMPA, EDTMPA or PBTC or salts of these phosphonates or any mixture therefrom,

C is cumenesulphonic acid or naphthalenesulphonic acid or an alkali metal/ammonium salts thereof, and

15 D is magnesium chloride, magnesium sulphate, calcium chloride or calcium sulphate.

7. Mixture according to Claim 5 or 6 wherein

- 20 A1) R^1 is a branched C_{10} -alkyl radical,
 R^2 is hydrogen, and
n has an average value of 7;

and in

- 25 A2) R^1 is a linear or branched C_{12} - C_{15} -alkyl radical,
 R^2 is hydrogen,
n has an average value of 6,

and

B is citric acid or sodium gluconate or DTPMPA or any mixture therefrom,

30 C is cumenesulphonic acid or an alkali metal/ammonium salt thereof, and

D is magnesium chloride or magnesium sulphate.

8. Mixture according to Claim 5 or 6 wherein
- 5 A1) is an alkoxylate of a linear or branched C₁₀-alcohol or mixtures thereof having on average 8 ethylene oxide units and 1 propylene oxide unit,
- and
- A2) is an alkoxylate of a linear or branched C₁₂-C₁₅-alcohol having on average 7 ethylene oxide units,
- and
- 10 B is a mixture of citric acid and sodium gluconate,
- C is sodium cumenesulphonate, and
- D is magnesium chloride.
- 15 9. Mixture according to Claim 7 wherein
- B is a mixture of citric acid and sodium gluconate,
- C is sodium cumenesulphonate, and
- D is magnesium chloride.
- 20 10. Mixture according to any one of Claims 1 to 9 wherein said component A or the sum total of A1 and A2 has a concentration of 1% to 40% by weight, said component B has a concentration of 1% to 20% by weight, said components C and D each have a concentration of 0.1% to 10% by weight, based on the entire aqueous mixture.
- 25 11. Mixture according to any one of Claims 1 to 10 wherein the concentration of component A or of the sum total of A1 and A2 is 7% to 20% by weight, of component B is 2% to 10% by weight and of components C and D is in each case 0.4% to 5% by weight.
- 30 12. Mixture according to any one of Claims 1 to 11 wherein the concentration of component A or of the sum total of A1 and A2 is 14% to 20% by weight, of component B is 3% to 8% by weight and of components C and D is in each case

0.6% to 2. 5% by weight.

13. Mixture according to any one of Claims 1 to 12 wherein foam-suppressing components and defoamers are used as additional additives.
- 5 14. Use of a mixture according to any one of Claims 1 to 13 to pretreat textiles.
15. Process for pretreating textiles which comprises steps of
- setting a liquor ratio of 5:1 to 20:1, preferably 8:1 to 10:1,
 - 10 - heating the treatment bath to 25-60°C, preferably to 30-50°C,
 - adding 0.5-8 ml/l, preferably 1-4 ml/l of a mixture in accordance with Claim 1,
 - adding 1-20 ml/l, preferably 2-3 ml/l of hydrogen peroxide 50%,
 - adding 1-10 ml/l, preferably 1.5-3.5 ml/l of aqueous sodium hydroxide solution 50%,
 - 15 - further heating the treatment bath to 8-130°C, preferably to 95-100°C,
 - holding this temperature for 15-90 minutes, preferably for 40-50 minutes,
 - cooling and dropping the bath,
 - optionally hot rinsing at 50-100°C, preferably at 70-90°C,
 - 20 - optionally cold rinsing and dropping the bath.
16. Process for cellulosic or cellulosic-synthetic fibre blend pretreatment comprising steps of
- providing a vessel;
 - 25 - providing a cellulosic or cellulosic-synthetic fibre blend substrate;
 - providing a water bath;
 - adding an aqueous mixture according to Claim 1,
 - optionally adding an active amount of an activating compound selected from the group consisting of salts of organic acids, organic amine derivatives, transition metal salts or transition metal complexes,
 - 30 - adding an active amount of caustic soda to obtain a starting bath having an alkaline pH;
 - adding an active amount of hydrogen peroxide;

- heating the water bath to a temperature of 80-130°C during a time period;
- optionally cold or warm rinsing,
- optionally adding catalase.

5 17. Process according to Claim 16, wherein

- the aqueous mixture is added in a concentration of 0.5-4 g/l.